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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,461

08/15/2003

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16869N-089700US

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7590

07/13/2006

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EXAMINER

CHU, KIM KWOK

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

2. Claims 1-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kimura et al. (U.S. Patent 5,815,477).

Kimura teaches an information recording and reproducing apparatus having all the elements and means as recited in claims 1-3. For example, Kimura teaches the following:

(a) as in claim 1, the information recording and reproducing apparatus which irradiates an information recording medium 1, 2 with oscillated laser light to form a recorded region in a recording area on the information recording medium (Fig. 2);

(b) as in claim 1, the recorded region being physically different from the region where information has not been recorded, so that information can be recorded onto the information recording medium and reproduced or erased therefrom (Fig. 11A; recording bit is formed by heating power);

(c) as in claim 1, means 16 for detecting amplitude information from a reproduced signal (Fig. 2; column 5, lines 32 and 33);

(d) as in claim 1, means 17, 19 for converting the detected signal to a digital signal (Fig. 2; A/D converters are included in means 17 and 19; column 5, lines 38-40);

(e) as in claim 1, means 18 for calculating on the digital signal obtained (Figs. 2, 4-6);

(f) as in claim 1, the recording power for information recording and reproducing is adapted by using the recording condition recorded on the recording medium as amplitude information PL, PH1, PH2, and the change ratio of the amplitude to the recording power (Figs. 4-6; column 6, lines 20-22; the change ratio remains constant);

(g) as in claim 2, the recording condition is adapted for a linear recording velocity by reading from the recording medium the recording condition recorded on the recording medium as amplitude information and the change ratio of the amplitude to the recording power (Figs. 2 and 9; test pattern read under certain linear recording velocities based on different radius);

(h) as in claim 2, calculating a recording condition appropriate for the linear recording velocity by using amplitude information associated with at least two linear

recording velocities and the change ratio of the amplitude to the recording power; and setting the recording power accordingly for information recording and reproducing at the linear recording velocity (Figs. 2 and 9; obtaining recording power PH1, PH2 under different linear velocities based on radius);

(i) as in claim 3, the recording condition (test pattern) is adapted by reading from the recording medium the recording condition recorded on the recording medium as amplitude information and the change ratio of the amplitude to the recording power (Figs. 4-6);

(j) as in claim 3, before recording information, checking the change ratio of the amplitude to the recording power, which is specific to the information recording and reproducing apparatus concerned (Figs. 4-6 and 9; obtaining optimum recording power); and

(k) as in claim 3, adapting the recording power for information recording and reproducing by using the change ratio of the amplitude to the recording power, which is specific to the information recording and reproducing apparatus concerned (Figs. 4-6).

3. Claim 4 has limitations similar to those treated in the above rejections of claims 1-3, and is met by the references as discussed above.

4. Claim 5 has limitations similar to those treated in the above rejections of claims 1-3, and is met by the references as discussed above. Claim 5 however also recites the following limitation which is also taught by the prior art of Kimura:

(a) as in claim 5, recording condition and information about the change ratio are previous recorded (Fig. 4, step S1; test pattern contains previous recording condition and recording powers).

5. Claim 6 has limitations similar to those treated in the above rejections of claims 1-3, and is met by the references as discussed above. Claim 5 however also recites the following limitation which is also taught by the prior art of Kimura:

(a) as in claim 6, recording condition and information about the change ratio are previous recorded (Fig. 4, step S1; test pattern contains previous recording condition and recording powers at different radius).

6. Claim 7 has limitations similar to those treated in the above rejections of claims 1-3, and is met by the references as discussed above. Claim 5 however also recites the following limitation which is also taught by the prior art of Kimura:

(a) as in claim 7, recording condition and information about the change ratio are previous recorded (Fig. 4, step S1; test pattern contains previous recording condition and recording powers at different radius).

#### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Saga (6,678,220) is pertinent because Saga teaches a method of determining the recording energy.

Sasaki et al. (6,339,578) is pertinent because Sasaki teaches a method of determining the recording energy.

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch, can be reached on (57) 272-7589.

The fax number is:

(571) 273-8300 (for formal communications intended for entry. Or:

(571) 273-7585, (for informal or draft communications, please label "PROPOSED" or "DRAFT").

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**WAYNE YOUNG**  
**SUPERVISORY PATENT EXAMINER**

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*14 7/7/06*

Examiner AU2627  
July 7, 2006

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